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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------|-------------|-------------------------|---------------------|------------------|
| 10/600,455 | 06/23/2003 | Shinya Sasamoto | NISCA USP267 | 7230 |
| 7590 05/04/2005 | | EXAMINER | | |
| James C. Wray | | | DEUBLE, MARK A | |
| Suite 300 1493 Chain Bridge Road | | | ART UNIT | PAPER NUMBER |
| McLean, VA 22101 | | | 3651 | |
| | | DATE MAILED: 05/04/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|--|-----------------------|-----------------|--|--|--|
| Office Action Summary | | 10/600,455 | SASAMOTO ET AL. | | | |
| | | Examiner | Art Unit | | | |
| | | Mark A. Deuble | 3651 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)□ | Responsive to communication(s) filed on | | | | | |
| · · · · · · · · · · · · · · · · · · · | | action is non-final. | | | | |
| 3) | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) | 4) Claim(s) is/are pending in the application. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5)□ | 5) Claim(s) is/are allowed. 6) Claim(s) <u>1-12 and 14</u> is/are rejected. | | | | | |
| | | | | | | |
| · | 7) Claim(s) is/are objected to. | | | | | |
| 8)[_] | Claim(s) are subject to restriction and/or | election requirement. | | | | |
| Applicati | ion Papers | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 09/839,662. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 2) Notic 3) Inform | re of References Cited (PTO-892) re of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |

Application/Control Number: 10/600,455 Page 2

Art Unit: 3651

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9-12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 states that the apparatus has "a shifting means to change a width direction of the accumulated stacked position of sheets on the processing tray..." This language renders the scope of the claims impossible to ascertain because it is not understood how a width *direction* can be changed by the shifting means. It is believed that the claim should recite "a shifting means to change a width *position* of the of the accumulated stacked sheets on said processing tray..."

Claim 14 states that the leading plurality of sheets directly discharged to said stacking tray and a subsequent sheet set are handled as a single set discharged to said stacking tray via said processing tray. It is unclear how two different sets of sheets can also be a single set of sheets as this language suggests.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3651

2. Claims 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. (U.S. Patent No. 5,137,256), as in the paper of October 5, 2004.

Sato et al. shows a sheet processing apparatus 27 which can sort or staple sheets discharged from the image-processing unit. The sheet processing unit comprises a stacking tray 103 which stacks sheets with indicia formed thereon, a processing tray 77 for receiving sheets in a process leading to the stacking tray, and a shifting means 80 which changes the accumulated stacked position of sheets on the processing tray. Sensor S5 is connected to a control means so that it may provide a capacity recognition means that counts the number of sheets delivered to the processing tray thereby recognizing the stacked amount of sheets to stack on the processing tray. In operation, the shifting means makes the position of the leading discharged sheets on the processing tray and the position of subsequent sheets on the processing tray the same before discharging sheets stacked on the processing tray to the stacked tray when it is recognized that the tacking limit capacity of the processing tray has been surpassed by the sheets stacked on the processing tray. Thus Sato et al. shows all the structure required by claims 9 and 11.

In regard to the limitations of claim 10 that the capacity recognition means temporarily stops the stacking of subsequent sheets onto the processing tray when it is recognized that the amount stacked on the sheets on the processing ray has exceeded the stacking limit of the processing tray, it should be noted that there would inherently be a temporary stoppage of stacking of subsequent sheets when the stacking limit has been detected by the capacity recognition means.

In regard to the added limitation that the shifting means "change a width direction of the accumulated stacked position of sheets of sheets on said processing tray;" it should be noted that

the shifting means moves sheets laterally so that it changes a width position of the sheets on the processing tray as required by the claims.

In regard to the added limitation that the apparatus includes "control means that continue the operation of the shifting means ..." it should be noted that the CPU 62 inherently provides such a control means.

3. Claims 9-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Rizzolo et al. (U.S. Patent No. 5,288,062), as in the paper of October 5, 2004.

Rizzolo et al. shows a sheet processing apparatus which can sort or staple sheets discharged from the image-processing unit. The sheet processing unit comprises a stacking tray 92 which stacks sheets with indicia formed thereon, a processing tray 95 for receiving sheets in a process leading to the stacking tray, and a shifting means 96 which changes the accumulated stacked position of sheets on the processing tray. Sensor 161 is connected to a control means so that it may provide a capacity recognition means that senses the level of the sheets to measure the height level of the sheets stacked on the processing tray thereby recognizing the stacked amount of sheets to stack on the processing tray. In operation, the shifting means makes the position of the leading discharged sheets on the processing tray and the position of subsequent sheets on the processing tray the same before discharging sheets stacked on the processing tray to the stacked tray when it is recognized that the tacking limit capacity of the processing tray has been surpassed by the sheets stacked on the processing tray. Thus Rizzolo et al. shows all the structure required by claims 9 and 12.

In regard to the limitations of claim 10 that the capacity recognition means temporarily stops the stacking of subsequent sheets onto the processing tray when it is recognized that the

amount stacked on the sheets on the processing ray has exceeded the stacking limit of the processing tray, it should be noted that there would inherently be a temporary stoppage of stacking of subsequent sheets when the stacking limit has been detected by the capacity recognition means.

In regard to the added limitation that the shifting means "change a width direction of the accumulated stacked position of sheets of sheets on said processing tray," it should be noted that the shifting means moves sheets laterally so that it changes a width position of the sheets on the processing tray as required by the claims.

In regard to the added limitation that the apparatus includes "control means that continue the operation of the shifting means ..." it should be noted that the controller 160 inherently provides such a control means.

In regard to new claim 14, it should be noted, that leading sheets sets discharged from the processing tray and sets of sheets discharged subsequently directly to the stacking tray when the apparatus is operated in a non-processing mode would be overlapped. When more than one set of sheets is on the stacking tray, it may be said that they are being handled as a single set discharged to the stacking tray. Thus, Sato meets all the limitations of claim 14.

Response to Arguments

4. Applicant's arguments filed February 4, 2005 have been fully considered but they are not persuasive.

Applicant's representative argues on pages 5-6 of the paper noted above that Sato fails to disclose temporarily discharging sheets to a stacking tray when the storage capacity of the processing tray is exceeded and then shifting to stack subsequent sheets in the same position on

Art Unit: 3651

the processing tray when sorting sheets. Specifically, the applicant's representative argues that because the stacking tray 103 is shifted so that sheets are placed in different positions thereon, the apparatus does not shift sheets on the processing tray to sort them as is taught in the present invention.

While this characterization of Sato is generally accurate, Sato still meets all the limitations of the claims because the claims do not require that the shifting of sheets on the processing tray is the act of sorting the sheets. The shifting means of Sato shifts the sheets on the processing tray to align the sheets after a predetermined stacking capacity has been reached as a step in the sorting process of the sheets. In this operation, the position of the first set of sheets on the processing tray and the position of all subsequent sets of sheets stacked on the processing tray are made the same on the processing tray before the sheets are discharged to the stacking tray when sorting sheets. Thus it may be said to meet the limitations of the claims.

Applicant's representative argues on page 6 that Sato does not mention having control means for canceling the shifting operation by detection of the volume of sheets stacked on the processing tray, discharging a sheet set to the stacking ray and then shifting after that discharge to continue until a predetermined number of sheets of that set has been reached at the same position of the processing tray. It should be noted, however, that this limitation is not recited anywhere in the claims and therefore it not part of the present invention. Furthermore, even if the claims did require such a control means, the CPU controls the shifting means of Sato to continue shifting sets of sheets on the processing tray for alignment after a first set of sheets has been discharged.

Page 7

Art Unit: 3651

Applicant's representative also argues that Rizzolo fails to disclose temporarily discharging sheets on the processing tray to the stacking when using the processing tray for sorting and the storage capacity of the processing tray is exceeded, then shifting to the same position of the processing tray for subsequent sheets of the same set. According to the representative, this is because the sensor does not detect the limit of storage of sheets on the processing tray and therefor nothing disclosed in Rizzolo relates to sorting of sheets. While the apparatus of Rizzolo et al. does not sort sheets in the fashion of the present invention, it may still be said to sort sheets in some fashion. This is especially true in light of the fact that the sorting operation of the present invention results with sheets stacked in the same position rather than in different positions as is typical in sheet sorting. Furthermore, it should be noted that there is no language in the claims requiring the processing tray be used for sorting, only that the entire apparatus sort she sheets in some fashion. Thus Rizzolo meets all the limitations of the claims.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3651

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912. The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine A Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

SUPERVISORY PATENT EXAMINER

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